That was close: 'Near misses', 'dangerous occurrences' and 'hazardous exposures' in the Australian Army

Orr, Rob Marc; Pope, Rodney R; Rigby, Timothy; Schram, Ben

AMMA CONFERENCE ABSTRACT
Please complete all sections of the abstract template.

Title: A close one: 'Near misses', 'dangerous occurrences' and 'hazardous exposures' in the Australian Army

Authors: Orr, R.M., Pope, R., Rigby, T. & Schram, B.

Presenter: Orr, R.M.

Presenters Bio (no longer than 200 words):
Rob served for over 20 years in the Australian Regular Army as an infantry soldier, physical training instructor, physiotherapist and human performance officer. Still serving in the Army Reserve on various human performance projects, Rob took up an appointment at Bond University where the majority of his teaching is on maximising human potential. With a PhD in occupational load carriage for military personnel, Rob has over 40 peer reviewed publications specialising in tactical populations alone and has been invited to present his research both nationally and internationally for a variety of tactical organisations.

ABSTRACT

INTRODUCTION: Occupational health and safety incidents, such as 'hazardous exposures', 'near misses' and 'dangerous occurrences', place the safety of military personnel at serious risk. These incidents, which can differ between service type (e.g. full-time and reserve personnel) can serve as a warning to the Australian Army as to where future potential injuries and fatalities may occur if risk management strategies are not implemented.
AIM: The aim of this study was to investigate reported incidents in Australian Army personnel and compare differences between full-time (Australian Regular Army [ARA]) and part-time (Army Reserves [ARES] personnel.

METHODS: A retrospective cohort study was conducted using data sourced from the Workplace Health, Safety, Compensation and Reporting (WHSCAR) database. Non-identifiable data spanning the period 1st July 2012 to 30th June 2014 were provided. Data were included in the study if the incident: (a) involved ARA or ARES personnel; (b) occurred when the soldiers were on duty or in training, (c) occurred during service between 01 July 2012 and 30 June 2014. Data were excluded if the incident: a) was an injury or fatality, or b) was to a service animals. The Australian Defence Human Research Ethics Committee (Protocol LERP 14-024) and the Bond University Human Research Ethics Committee (Protocol RO1927) granted ethics approval for this study.

RESULTS: Of the reported 3,791 incidents, 96% involved ARA personnel and 4% ARES personnel. When accounting for population size and days of service the ARA reported 6.18 incidents per 100 soldiers-years of active service and the ARES 3.29 incidents per 100 soldiers-years of active service. Across both populations, the leading activity for which an incident was reported was *operations* (n=2,096, 99.4%) followed by *weapon firing* (n=304, 8.0%) and *unknown* (n=206, 5.4%). In the ARA, 84% of incidents were *hazardous exposures* (68.2% due to *operations*), 14% *near misses* (22.0% due to *driving*) and 2% *dangerous incidents* (36.9% due to *weapon firing*). In the ARES, 55% of incidents were *hazardous exposures* (30.2% due to *unknown causes*, 24.4% *as a passenger*), 38% *near misses* (45.5% due to *driving*), and 7% *dangerous incidents* (41.4% due to *weapons firing*). The *Private / Private equivalent* ranks had the higher rate of incidents (37%) across both service types, followed by *Corporal / Corporal equivalent* ranks (27%).

CONCLUSIONS: Apart from exposure reported by ARA personnel due mostly to *operations, weapon firing and driving* present as leading incidents placing the health and wellbeing of ARA and ARES personnel at risk. Risk mitigation strategies, focussing on operational exposures, weapons firing and driving are recommended to reduce the level of risk and possibly injury, mortality and illness suffered by Australian Army personnel. These strategies should be targeted towards the *Private / Private equivalent* and *Corporal / Corporal* equivalent ranks.

Authors(s) affiliations: Bond University

Corresponding author: Rob Orr

Corresponding authors contact details:
Bond Institute of Health and Sport
Bond University
2 Promethean Way
Robina, 4229
Ph: 0468 646 027

Corresponding authors email: rorr@bond.edu.au

AMMA CONFERENCE ABSTRACT

Please complete all sections of the abstract template.